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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/126,156	07/30/98	GRABOWSKY J	TET-1689

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EXAMINER	
GIBSON,E	
ART UNIT	**PAPER NUMBER**
3661	3

DATE MAILED: 10/01/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/126,156	Grabowsky et al.
Examiner	**Group Art Unit**
Eric M. Gibson	3661

☒ Responsive to communication(s) filed on *Jul 30, 1998*.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-33* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-24 and 33* is/are rejected.

☒ Claim(s) *25-32* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *2*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On page 9, line 7, the Internet is referred to as 16, it should be 45. Figure 8 is described as a flowchart of step 136, but is incorrectly labeled 134 in the drawings.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8- 13, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 13 recite the limitation "said digital flight data acquisition unit" in lines 4 and 14, respectively. There is insufficient antecedent basis for this limitation in the claim. Specifically, there is a lack of antecedent basis for the term "digital" as it appears in both claims.

Claims 9-12 depend on claim 8 which is rejected as explained above.

Claim 16 recites the limitation "said means for sending data" in line 2. There is insufficient antecedent basis for this limitation in the claim. This can be corrected by changing "sending" to "transmitting" as used in claim 15.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7-8, 10, 12, 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. Bailey et al. discloses a data acquisition unit in communication with sensors that transmits vehicle data via a communications unit to a remote data reception unit using a cellular infrastructure. Transmission of data by the communications unit is accomplished through a personal computer microprocessor by using a cellular modem using a cellular digital packet data network. The data is transmitted through a serial interface over cellular channels in the infrastructure to a router in the data reception unit. Aircraft are considered to be "vehicles."

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Cleave. Bailey et al. discloses the invention as explained in the previous rejections. Bailey et al. does not teach using the Internet or public switched telephone network (PSTN) to receive the data from the cellular infrastructure at the data reception unit. Cleave teaches in column 4, lines 44-47, the use of the Internet or PSTN coupled to the gateway to receive the information at the data reception unit in a data communications system. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to provide the invention of Bailey et al. with a connection to the Internet or PSTN in order to receive the data from the cellular infrastructure.

Claims 5- 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. Bailey et al. discloses the invention as explained in the previous rejections. Bailey et al. does not teach a cellular infrastructure with an antenna, transceiver subsystem, and controller. It is well known in the art that in order for a cellular communications system to operate it must contain these items. It would have been obvious to one of ordinary skill in the art, at the time of

invention , to include in the invention of Bailey et al. the components of a cellular system that are well known in the art in order for it to function properly.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. Bailey et al. discloses the invention as explained in the previous rejections. Bailey et al. does not teach that the processor may be an application specific integrated circuit (ASIC) or that the processor has an I/O interface. It is well know in the art to use an ASIC for specific applications. It is also well known in the art to use an I/O interface connected to a processor to allow for the exchange of data with the processor. It would have been obvious to one of ordinary skill in the art, at the time of invention, to include in the invention of Bailey et al. the features of a processor that are well known in the art in order to allow better operation.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. in view of Krenzel. Bailey et al. teaches the use of a cellular digital packet data network in the invention as previously explained. Bailey et al. does not teach the use of compression or encryption in the data network. Krenzel teaches compression/uncompression of data in column 3, lines 30-41, for the use in a data communication system. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include in the invention of Bailey et al. the data compression/uncompression as taught by Krenzel in order to reduce the file size of the data needed to be transmitted, increasing the speed of transmission. Encryption, and subsequent decryption at the receiving end, is well known in the art to provide additional security for the transmission of data via a wireless system. It would have been obvious to one of ordinary skill

in the art, at the time of the invention, to include data encryption and decryption in the invention of Bailey et al. in order to provide additional security over a wireless system.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al in view of Steiner and in further view of Krenzel. Bailey et al. teaches the invention as explained in the previous claims including the use of disk drives for data storage. Bailey et al. in combination with Krenzel teach the invention as explained in the rejection of claim 23. The combination of Bailey et al. and Krenzel do not teach acknowledging receipt of data. Steiner teaches the acknowledgment of receipt of data in column 9, lines 16-17, in a data packet communication system. It would have been obvious to one of ordinary skill in the art, at the time of invention, to include in the combination of Bailey et al. and Krenzel the data acknowledgment receipt of Steiner in order to ensure proper delivery of data through the system.

Claim 33 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bailey et al. Bailey et al. does not teach writing a computer program to a suitable medium to implement the steps of data exchange when the program is executed by the processor. The writing of programs stored on computer readable media to implement specific functions is well know in the art. Several programs exist that are well know in the art of data transmission, refer to Winslow, column 4, lines 20-29 for examples of data transmitting programs that are well known in the art.

Allowable Subject Matter

Claims 25-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaman teaches remote vehicle data collection using data packet technology over a cellular network and using PSTN and Internet resources to collect data at a central station. McCoy teaches a remote data collection device with cellular communication means to send data to a communications site. Levine teaches the transmission of aircraft flight data over a wireless communications system to a central ground based processing station. Averbuch et al. teaches a radio communication system utilizing a data router, data packets, PSTN, and Internet Protocol destination addresses. Fraker et al. teaches a vehicle data communication system which communicates data to a central location using cellular technology and the steps of transmission of data. Westerlage et al. teaches data messaging in a communications network with remote units. Barbiaux et al. teaches a system wherein a vehicle communicates data to a remotely located base station via a rf communication means. Zinser, Jr. teaches information communication between an aircraft and a ground unit utilizing cellular technology for the

transmission of data. Podowski et al. teaches a system of data communication using cellular transmission technology for aircraft. Severwright teaches a telecommunications system for an aircraft that communicates with a ground station. Winslow is used as a reference to the known computer readable applications used for the transmission of data between a remote unit and a command center as applicable in the data communications art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (703) 306-4545.

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